***Software Requirements***

***Specification***

for

*ElectroBasket App*

*Version 1.0 approved*

*Prepared by*

*<Aman Khandelwal(U101116FCS007)*

*Arshita Batra(U101116FCS284)*

*Chinju Mary George(U101116FCS025)*

*Siddhant Shah(U101116FCS129)*

*Shashwat Shah(U101116FCS112)>*

*<Software Engineering CS-301>*

*<23rd September 2018>*

Table of Contents

Table of Contents............................................................................................................ ii

Revision History.............................................................................................................. ii

1... Introduction................................................................................................................3

1.1 Purpose.....................................................................................................................3

1.2 Document Conventions.............................................................................................3

1.3 Intended Audience and Reading Suggestions...........................................................3

1.4 Product Scope.......................................................................................................... 4

1.5 References............................................................................................................... 4

2... Overall Description................................................................................................... 4

2.1 Product Perspective..................................................................................................4

2.2 Product Functions.................................................................................................... 5

2.3 User Classes and Characteristics.......................................................................... .5

2.4 Operating Environment..............................................................................................5

2.5 Design and Implementation Constraints...................................................................5

2.6 User Documentation..................................................................................................5

2.7 Assumptions and Dependencies...............................................................................6

3... External Interface Requirements............................................................................ ...6

3.1 User Interfaces...........................................................................................................6

3.2 Hardware Interfaces...................................................................................................6

3.3 Software Interfaces....................................................................................................6

3.4 Communications Interfaces.......................................................................................6

4... System Features........................................................................................................7

4.1 System Feature 1.......................................................................................................7

4.2 System Feature 2 ......................................................................................................7

4.3 System Feature 3.......................................................................................................8

4.4 System Feature 4 .....................................................................................................8

4.5 System Feature 5 Use Case and other features ...................................................9

5... Other Nonfunctional Requirements........................................................................ ..10

5.1 Performance Requirements......................................................................................11

5.2 Safety Requirements.................................................................................................11

5.3 Security Requirements..............................................................................................11

5.4 Software Quality Attributes........................................................................................11

5.5 Business Rules.........................................................................................................11

6.Other Requirements.....................................................................................................11

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| **Prof.Amit Kumar** | 20/9/18 |  | 1.0 |
|  |  |  |  |

# **1.Introduction**

## **1.1 Purpose**

This Product is an android app that will be useful for the various Businesses running in our Country.

This app will interact the Salesmen of the company to the Sub-Dealers and the Dealers and request the order of the particular product required by the Shop in his locality or area.

## **1.2 Document Conventions**

There are no such conventions followed in this document.

## **1.3 Intended Audience and Reading Suggestions**

This Document is intended for the Businessmen who will be our primary customers,Developers and Testers. This Product has been implemented under the guidance of college professors.

## 

## **1.4 Product Scope**

This goal of the application is to make the functioning of the businesses smoother and much easier.The Deals within the company will be more transparent and the Dealer can identify which products are in demand.

## **1.5 References**

IEEE SRS template

UML Use Case Diagram

**1.6 Terminology**

|  |  |
| --- | --- |
| **Term** | **Description** |
| **User** | Dealer, Sub-dealer and Salesman of the company. |
| **Database** | Collection of information of different topics required for the implementation of project. |
| **Graph** | The graph will denote the sales of goods geographically. |

# **2. Overall Description**

## **2.1 Product Perspective**

The Application is being developed for Electrical Businessmen of Pune, Maharashtra. This is a self sustained Product which will helps the Dealer of the Particular state to see the orders placed by the Sub-dealer and the Salesmen of company and helps to meet their requirement. Their will be 3 kinds of users-

**The Dealer:** He can see each and every order placed by the Sub-Dealer and the Salesman and then fulfil their requirements.

**The Sub-dealer:** He can see the orders placed by the Salesmen and place the order to the dealer if he will unable to fulfil the product requirement of the salesmen.

**The Salesman:** He can place the order made by the shopkeepers in his desired area.

## **2.2 Product Functions**

The major Function of the product is that the Salesmen and the Sub-dealer must be able to place the orders in the app and which will be visible to the dealer and he can keep track of all the functioning of the orders and stocks.

## **2.3 User Classes and Characteristics**

The App will support three privileges,Dealer,Sub-dealer and the Salesmen.

The Dealer can -

· See the Orders placed by the Dealer, Sub-dealer and Salesmen.

· View all the activities of the Sub-dealer and Salesmen.

· Fulfil the demands of Sub-dealer and Salesmen.

The Sub-dealer can -

· Place an Order to the dealer

· See the Orders placed by the Sub-dealers

· Cancel the Order Placed to the Dealer

The Salesman can -

· Place an order to the Sub-dealer.

· Cancel the Placed Order.

## **2.4 Operating Environment**

Our Application will be primarily be Operated on the Android Platform and works on all the upgraded or latest versions of android.

## **2.5 Design and Implementation Constraints**

This app won’t work for IOS devices and android versions lower than android Ice Cream Sandwich.

## **2.6 User Documentation**

(Video will be added after completion of the project).

## **2.7 Assumptions and Dependencies**

The applications data can be affected if the **database** is refreshed or not properly maintained and can lead to confusion among the customers.

# **3. External Interface Requirements**

## **3.1 User Interfaces**

**Front End Software:**

An Android GUI which will have buttons, navigation bar and 4-5 tabs which will differ from Dealer to Salesmen and a my Orders page will display the orders placed by the Customers and will also have a login and Sign up page.

**Back end:**

The project will be developed on the Android Studio Platform and the **database** used to store the needs and demands will be either fire base or SQL.

**3.2 Hardware Interfaces**

Android Phones.

Android Tablets.

## **3.3 Software Interfaces**

* We use FireBase for **database** purpose.
* It’s the Best for Mobile Developing Application

## **3.4 Communications Interfaces**

1. The Project is Android Based and hence does not require any server protocols and HTTP as such.
2. The App Must Verify the mail id during the sign-up.
3. Internet connection will be used for communicating with the ***database*** and server.

# **4. System Features**

This template explains all the features and description of the application.

## **4.1 Login/SignUp**

**4.1.1 Description and Priority**

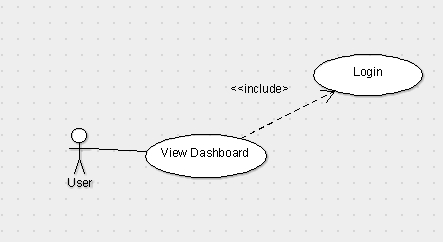
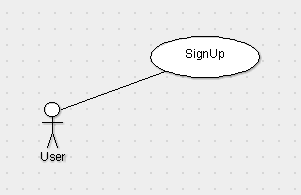
The system’s users are given a workspace from which all of their communication will take place where the user can login to the app and will be able to access the App.The priority here is that the user will be authenticated to the app.

**4.1.2 Stimulus/Response Sequences**

If the user wants to add any personal details such as name or address it will be updated and the app will create an artifact with specified metadata.

**4.1.3 Functional Requirements**

The Login/Sign-up Page will help to authenticate the user and display an error if the password or the mobile number is invalid.



## **4.2 Place Orders**

**4.2.1** **Place Orders(Salesman)**

**4.2.1.1 Description and Priority**

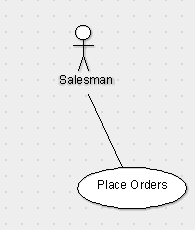
The priority here is that the Salesman can place orders based on the requirements.

**4.2.1.2 Stimulus/Response Sequences**

If the Salesman want to add or place any order there will be a “place- order” button which when pressed will order all the goods and their quantity .

**4.2.1.3 Functional Requirements**

In this the Salesman will be provided a list of goods from which order can be placed



**4.2.2** **Place Orders(Sub-dealer)**

**4.2.1.1 Description and Priority**

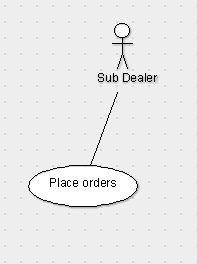
The priority here is that the Sub-dealer can place order based on the requirements.

**4.2.1.2 Stimulus/Response Sequences**

If the Sub-dealer want to add or place any order there will be a “place- order” button which when pressed will order all the goods and their quantity .

**4.2.1.3 Functional Requirements**

In this the Sub-dealer will be provided a list of goods from which order can be placed



## **4.3 View Order**

**4.3.1 View Order(Dealer)**

**4.3.1.1 Description and priority**

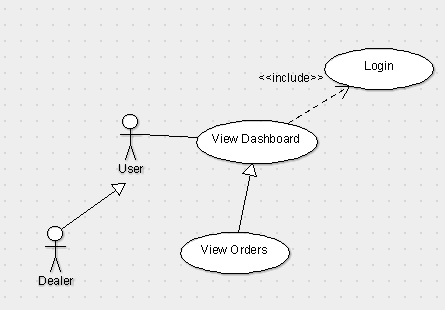
This function will enable the Main Dealer to view all the Orders placed by the Sub-dealer and keep the record of all the Orders.

**4.3.1.2 Stimulus/Response Sequences**

There will be a ‘View order’ button which when pressed will show list of all the orders and the quantity placed by the Sub-dealer and the time at which the Order is Placed.

**4.3.1.3 Functional Requirements**

The View Order function will enable the Main Dealer to view and keep track of all the Orders and the time at which order is placed by Sub-dealer.



**4.3.2 View Order(Sub-Dealer)**

**4.3.2.1 Description and priority**

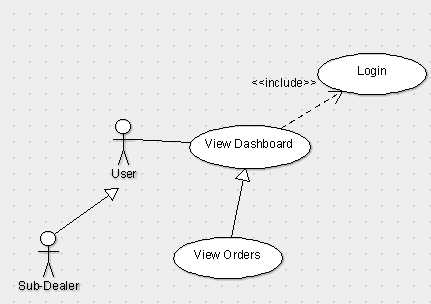
This function will enable the Sub Dealer to view all the Orders placed by the Salesman and keep the record of all the Orders.

**4.3.2.2 Stimulus/Response Sequences**

There will be a ‘View order’ button which when pressed will show list of all the orders and the quantity placed by the Salesman and the time at which the Order is Placed.

**4.3.2.3 Functional Requirements**

The View Order function will enable the Sub Dealer to view and keep track of all the Orders and the time at which order is placed by Salesman.



**4.3.3 View Order(Salesman)**

**4.3.3.1 Description and priority**

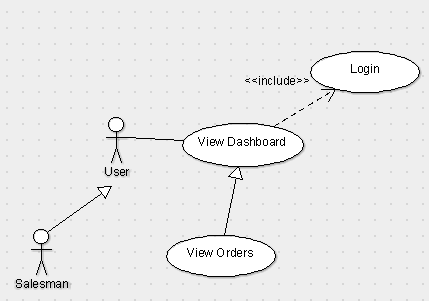
This function will enable the Salesman to view all the Orders he placed and keep the record of all the Orders.

**4.3.3.2 Stimulus/Response Sequences**

There will be a ‘View order’ button which when pressed will show list of all the orders and the quantity placed by the Salesman and the time at which the Order is Placed.

**4.3.3.3 Functional Requirements**

The View Order function will enable the Salesman to view and keep track of all the Orders and the time at which order is placed by himself.



**4.4 Details**

**4.4.1 Description and priority**

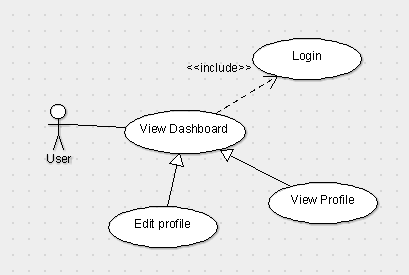
This function will allow the user to view all the details which will include name ,address , phone number,etc.

**4.4.2 Stimulus/Response Sequences**

In this there will be a button “details” in which user can view its personal information including name ,address ,phone ,number etc.There will be an update button in which user can update its personal details.

**4.4.3 Functional Requirements**

If the user is logged in, then he can edit his detail but if he is not a user than he needs to sign up and only then he can edit his details.



**4.5 Analytics**

**4.5.1 Description and priority**

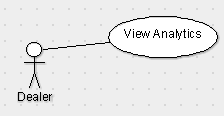
This function will describe the order of goods **graphically** and will explain which goods are order the most and vica versa to the Dealer..

**4.5.2 Stimulus/Response Sequences**

In this user will be provided a button “analytics” in this there will be a **graphical** representation of order and quantity with there proportion.

**4.5.3 Functional Requirements**

This function will help to see a **graphical** representation of all the stocks of the particular area.



**4.6 .Executive Mapping**

**4.6.1 Description and priority**

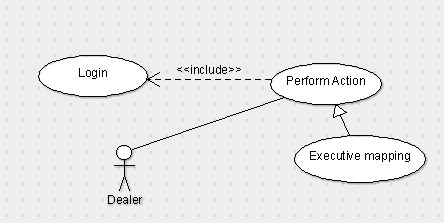
This Function will help to see the location of the Salesman and the time at which he went to a particular store.

**4.6.2 Stimulus/Response Sequences**

In this user will be provided a button “TRACK” in this there will be a complete record of salesman locations where he went.

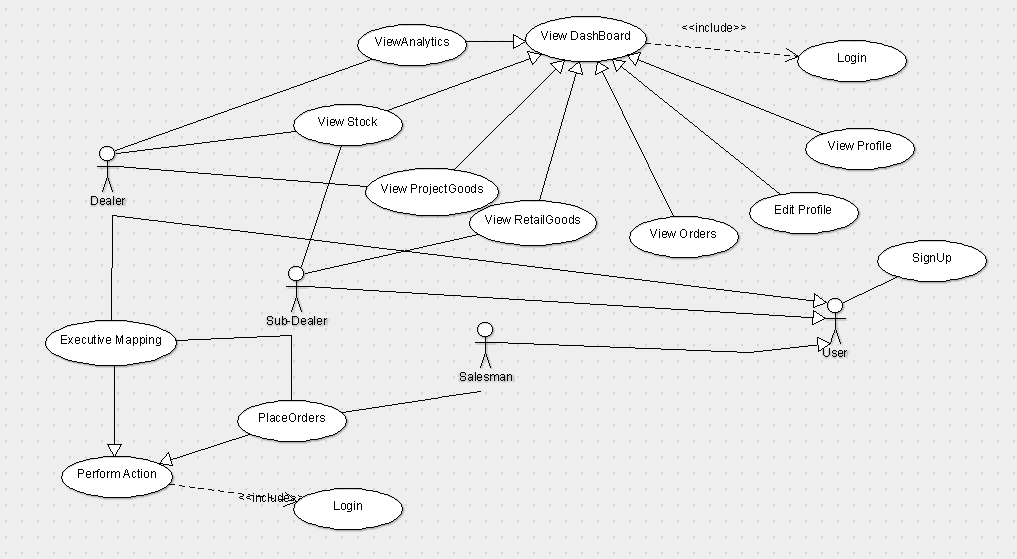
**4.6.3 Functional Requirements**

This function will help to see a **location** of all the salesman of the particular area.



Make a copy of 1 login use case. And put all arrows to it as include.

***The following is the use case diagram for the application:***



## **Use Case Description Table :**

|  |  |
| --- | --- |
| ***Use Case Title*** | ***Description*** |
| **1.Dealer Login** | The user Dealer needs to login to perform any actions |
| **2.Sub-Dealer Login** | The user Sub-Dealer needs to login to perform any actions |
| **3. Salesman Login** | The user Salesman needs to login to perform any actions |
| **4. SignUp** | New user needs to Sign up and select its respective category to further perform actions. |
| **5.View Orders(Dealer)** | Dealer can view order that have been placed. |
| **6. View Orders(Sub-Dealer)** | Sub-Dealer can view order that have been placed. |
| **7. View Orders(Salesman)** | Salesman can view order that have been placed. |
| **8.Place Orders(Salesman)** | Salesman can place or add order of respective goods. |
| **9. Place Orders(Sub-Dealer)** | Sub-Dealer can place or add order of respective goods. |
| **10.View Stock** | This Function will Help to View the total Stock Available with the Dealer. |
| **11.Executive Mapping** | This Function Will help to see the location of the Salesman and the time at which he went to a particular store. |
| **12.View Profile** | The user can view its personal details. |
| **13.Edit Profile** | The user can Edit his/her own Details. |
| **14.Goods** | There will be two type of goods i.Retail Goods(For Small Sub-Dealers)  ii.Project Goods(For Large Projects) |
| **15.Analytics** | The user can view and analyse the sales of goods geographically. |

## 

## **5. Other Nonfunctional Requirements**

## **5.1 Performance Requirements**

Every action-response must work smoothly with minimum delays possible. The maximum number of user that is supported by the system are 15 users approximately, users exceeding the maximum number can hamper the app or can cause delay.

## **5.2 Safety Requirements**

If there is any damage to the **Database** or if the Application crashes then a mail will generated by the firebase and the Firebase Analytics Report is generated by the firebase and mailed to the admin. Also the **Database** which we use is Google’s Firebase which never crashes and has excellent safety measures.

## **5.3 Security Requirements**

This Application Uses a Real time **Database** storage just like many other applications. Also keeping in mind the safety measures only the Authorized Logged in users can view and place orders and no external person can access the information.

## **5.4 Software Quality Attributes**

* **AVAILABILITY:** The Order placed should be available on the specified date and specified time as many Dealers will check the previous records made by the desired people.
* **CORRECTNESS:** The Order should reach the correct Sub-Dealer and Dealer with no loss.
* **MAINTAINABILITY:** The **Database** must be Correctly maintained and updated regularly
* **USABILITY:** The App must satisfy all the needs of the salesmen and the Sub-Dealers

## **5.5 Business Rules**

There Are No Business Rules As Such

**6. Other Requirements**

No Such Requirements 8